



# KDI SCHOOL

## WORKING PAPER SERIES

---

# **Exploring Determinants of Performance Indicator and Customer Satisfaction of Accommodation Sharing: Implication on Tourism Competitiveness**

Yooncheong Cho  
KDI School of Public Policy and Management

*December, 2019*  
*Working Paper 19-20*



This paper can be downloaded without charge at:  
KDI School of Public Policy and Management Working Paper Series Index:  
<http://www.kdischool.ac.kr/new/eng/faculty/working.jsp>  
The Social Science Network Electronic Paper Collection:  
<http://ssrn.com/abstract=3507438>

# **Exploring Determinants of Performance Indicator and Customer Satisfaction of Accommodation Sharing: Implication on Tourism Competitiveness**

## **Abstract**

How do customers and potential customers perceive the realities of the sharing economy? The sharing economy has grown rapidly and expanded to meet diverse needs beyond expectation. By focusing on accommodation sharing, the purpose of this study is to investigate determinants of occupancy rates and perceptions of existing and potential customers. By applying Airbnb data, this study examined current usage and effects of factors on performance indicator of accommodation sharing in tourism destinations (Study 1). Study 2 investigated effects of perceived factors on satisfaction and intention to use, effects of satisfaction on loyalty, and effects of loyalty on perceived tourism competitiveness. Study 2 applied online survey data collected from both existing and potential customers. This study applied statistical analyses such as factor and regression analyses, ANOVA, *t*-test, and MANOVA. Additionally, this study analyzed impacts of major variables in terms of demographics. The results of this study provide managerial and policy implications for the fields of accommodation sharing and tourism.

**Keywords:** Accommodation Sharing, Performance Indicator, Customer Satisfaction, Intention to Use, Loyalty, Tourism Competitiveness.

## **I. Introduction**

The fourth industrial revolution and network digitization have connected global customers by providing better services with the goal of maximized consumption efficiency. The sharing economy, known as access-based consumption (Bardhi & Eckhardt, 2012) and the hybrid economies of collaborative networks (Scaraboto, 2015) has been widely applied with the development of technology by connecting demand and supply. Various definitions and terms of the sharing economy such as on-demand-economy (Jaconi, 2014), sharing business (DBR, 2019), and

peer-to-peer economy (Botsman, 2013) address different perspectives to explain the characteristics of these businesses and provide various implications.

Previous studies have addressed the benefits and concerns of the sharing economy (Kim, 2019). Demailly and Novel (2014) outlined both the economic and environmental benefits of sharing by highlighting regenerating the sharing economy with sustainability, redistribution, and mutualization. Positivists argue for the sharing economy as the reintegration of production and consumption (Toffler, 1980; Ritzer & Jurgenson, 2010) and value change through collaboration (Humphreys & Grayson, 2008). Critics have highlighted the green sharing economy since the platforms are creating new markets that also boosts purchasing power (Schor, 2014). Lack of global citizenship and unprepared regulations are also obstacles to the sharing economy.

This study focused on accommodation sharing that plays a key role to build community by connecting global tourists and locals. With the presence and popularity of accommodation sharing, customers' expectations, perceptions, and behavior have been changed when they select a place to stay. While there are benefits of using accommodation sharing such as sharing culture and experience, strengthen tourism competitiveness by improving local homestay, creating job opportunities, concerns such as unprepared policies and different regulations across the countries and cities are obstacles for global tourists. Those people who raise negative aspects also include conflicts with traditional accommodation markets. Various studies have discussed the impacts of Airbnb on the hotel industry (Zervas, Proserpio, & Byers, 2014), while another study (Farronato & Fradkin, 2019) proved its effect on the existing industry based on price range.

This study posits that accommodation sharing positively helps strengthen tourism competitiveness by increasing overall degree of satisfaction. This study proposed how accommodation sharing provides better benefits to customers as well as corresponding benefits to foster tourism competitiveness. This study first, investigated effects of key factors on performance

indicator by applying secondary data (Study 1). Study 1 includes objective factors such as effects of sharing types, communication attributes, price, and service on performance indicator which is occupancy rates, while Study 2 applied effects of perceived subjective factors such as trust, satisfaction, loyalty, and conative by classifying existing and potential customers. Study 2 examined the following: i) what are the factors that affect satisfaction with accommodation sharing; ii) what are the factors that affect intention to use of accommodation sharing; iii) how satisfaction affects loyalty; and iv) how loyalty and intention to use accommodation sharing affect tourism competitiveness.

## **II. Literature Review**

The sharing economy has been developed with various meanings such as sustainability. After the 2008 financial crisis and experience from the 20<sup>th</sup> century's supply-based economy, customers more concern about the environment with less of an owning philosophy that leads to the expansion of the sharing economy. Alternative definitions of the sharing economy address a number of shared meanings. The term sharing economy was coined by Lessig (2008) to focus on social relationships characterized by non-ownership, temporary access, and redistribution. Existing definitions vary in their level of inclusivity, depending on extent of sharing of goods and services, exchanges of services and property, and the sharing of all commons through cooperatives, public services, and participatory democracy (Agyeman et al., 2013).

Belk (2007) addressed owning vs. sharing defining the latter as the act and process of distributing what is ours to others for their use and/or the act and process of receiving or taking something from another for our use. Arnould and Rose (2015) proposed the term mutualism or mutualization instead of sharing. Böcker and Meelen (2017) looked into the social aspects of the sharing economy by addressing interactions between service users and providers. Botsman and

Rogers (2011) also highlighted the sharing economy with interactions such as getting to know a neighbor and socializing among friends, which are also important motivations to participate in the sharing economy. Demailly and Novel (2014) stated why previous studies used the term collaborative consumption because it is broad enough to include practices of collaboration using networks.

The sharing economy has seen the development of mesh technology that connects various devices. Galbreth, Ghosh, and Shor (2012) addressed the development of information technology (IT), focusing on social network services and the Internet's facilitation of peer-to-peer transactions, enabling the activation of the sharing economy. Current increased usage of online transactions and smart-phones have accelerated the growth of the sharing economy. Barnes and Mattsson (2016) stated that the use of online market places and social networking technologies facilitates peer-to-peer sharing of resources such as space, money, goods, skills, and services between individuals who may be both suppliers and consumers. The sharing economy is also classified based on the issue of monetary exchanges, with the argument that only non-monetary exchanges are pure "sharing".

Accommodation sharing such as Airbnb stated as the future of networked hospitality businesses is important consequences for tourism and for tourist destinations (Oskam & Boswijk, 2016). A study by Guttentag and Smith (2017) assessed Airbnb relative to hotels by considering hotel attributes. Guttentag, Smith, Potwarka, and Havitz (2018) also studied motivating factors of using Airbnb such as interaction, home benefits, novelty, sharing economy ethos, and local authenticity by classifying customers' characteristics. A study by So, Oh, and Min (2018) examined motivations and constraints of Airbnb consumers and found significant effects of motivations, price value, enjoyment, and home benefits on overall attitude toward Airbnb. Varma, et al. (2016) found that there are significant differences between the type and motivation of customers that book Airbnb

compared to those that book traditional hotels. Wang and Nicolau (2017) investigated the factors determining the price of sharing economy based accommodation, which differ from those determining hotel price. Tussadiah and Pesonen (2016) identified that the social and economic appeals of peer-to-peer accommodation significantly affect expansion in destination selection, increase in travel frequency, length of stay, and range of activities participated in tourism destinations.

### **III. Study 1: Use of Secondary Data**

This study is divided into two studies based on the use of secondary and primary data. Study 1 examined the current usage of accommodation sharing in travel destinations and developed hypotheses based on the effects of determinants on performance indicator. For business indicator, Study 1 applied occupancy rates. Two major areas (Busan and Jeju) known as destination brands for tourists in Korea were examined in Study 1.

#### **3.1 Current Usage of Airbnb in Travel Destinations**

Starting in 2014, customers' usage of Airbnb has rapidly increased in Korea. Registered, active, and reserved Airbnb listings and number of tourists of Airbnb from 2016 to 2018 in Busan and Jeju are increased rapidly based on analysis of data via airDNA, which is an organization that officially collects Airbnb data officially. Two cities designated as "regulation-free zones" by the Korean Government in 2016 are selected for Study 1. Under the title of regulation-free zones, both domestic and international travelers are allowed to use accommodation sharing services legally, while other regions except Gangwon comply with the regulations. For both Busan and Jeju, the number of registered, active, and reserved lists of accommodation sharing are increasing, while there are gaps in registered and actual accommodation sharing.

### 3.2 Current Usage of Airbnb based on Residential Sharing Types

Currently, accommodation sharing in Korea is allowed by the Tourism Promotion Act which is rooted in “Experience of Korea Traditional House” (‘Hanok’), “Homestays for foreign travelers in urban areas,” and “Homestays in farming and fishing villages” (Choi & Oh, 2017; Yoon, 2017). According to regulation policy, for cases of “Homestays for foreign travelers in urban areas,” and “Homestays in farming and fishing villages,” entire house sharing is banned, while hosts must stay with customers. This study examined sharing types as policy on P2P accommodation sharing regulate sharing without hosts, while proportion of registered sharing types is much higher with entire house. Table 1 summarized the number of registered Airbnbs location in Busan and Jeju based on sharing and property types.

**Table 1. Number of Registered Airbnb based on Sharing and Property Types**

Property Types	Sharing Types (Busan)				Sharing Types (Jeju)			
	Entire	Private	Shared	Total	Entire	Private	Shared	Total
Apartment	2,176	491	66	2,733	739	260	27	1,026
House	209	162	67	438	1,871	737	221	2,829
Loft	139	3		142	39	17	2	58
Villa	10	8	1	19	224	59	20	303
Total	2,534	664	134	3,332	2,873	1,073	270	4,216

Note: The listings are registered on the Airbnb platform and reclassified into four residential property types.

### 3.3 Current Usage of Airbnb based on Overall Rating

This study examined how overall rating is affected by factors such as accuracy of the description of accommodations, ease of check-in, communications between hosts and guests, locations of accommodations, and value by using online survey conducted by Airbnb. Different types of Airbnb reviews including overall rating provided by Airbnb help build trust and interactivity between providers and customers. In the case of Busan in Table 2, the cleanliness and price value show the stronger effects on overall rating than other factors for all types of sharing. Effects of variables for the entire house sharing showed all significant, while effects of variables



such as check-in and location factors for the private rooms and shared rooms showed insignificant. The result found different effects based on property types.

**Table 2. Results of Regression Analysis on Guests' Ratings in the case of Busan**

	Standard Coefficient (t-value-Sig)		
	All Sharing types	Entire House	Private and Shared
Rating_Accuracy → Rating_Overall	0.137 (8.82 ***)	0.155 (9.35 ***)	0.115 (3.09 ***)
Rating_Check-in → Rating_Overall	0.083 (6.00 ***)	0.11 (7.54 ***)	0.015 (0.43)
Rating_Cleanliness → Rating_Overall	0.363 (28.25 ***)	0.393 (27.59 ***)	0.276 (8.84 ***)
Rating_Communication → Rating_Overall	0.1 (6.94 ***)	0.05 (3.28 ***)	0.256 (7.00 ***)
Rating_Location → Rating_Overall	0.047 (4.16 ***)	0.055 (4.47 ***)	0.033 (1.23)
Rating_Price Value → Rating_Overall	0.331 (21.92 ***)	0.322 (19.81 ***)	0.325 (8.5 ***)
Number of Observation	2,431	1,961	470
S-square	0.8000	0.7769	0.8502

In the case of Jeju (Table 3), guests evaluate that the price value of accommodation sharing was the most strongly influenced in overall rating and cleanliness was the second significant factor. Effects of variables for the entire house sharing showed all significant, while effects of variables for the private rooms and shared rooms showed significant except accuracy.

**Table 3. Results of Regression Analysis on Guests' Ratings in the case of Jeju**

	Standard Coefficient (t-value-Sig)		
	All Sharing types	Entire House	Private and Shared
Rating_Accuracy → Rating_Overall	0.11 (7.14***)	0.165 (9.11***)	0.018 (0.63)
Rating_Check-in → Rating_Overall	0.116 (8.4***)	0.135 (8.14***)	0.082 (3.29***)
Rating_Cleanliness → Rating_Overall	0.239 (18.7***)	0.235 (16.07***)	0.249 (9.9***)
Rating_Communication → Rating_Overall	0.08 (5.66***)	0.074 (4.57***)	0.074 (2.59***)
Rating_Location → Rating_Overall	0.061 (5.16***)	0.055 (3.99***)	0.065 (2.9***)
Rating_Price Value → Rating_Overall	0.438 (27.37***)	0.394 (21.33***)	0.514 (15.94***)
Number of Observation	2,705	1,906	799
S-square	0.7322	0.7487	0.7095

### 3.4 Hypothesis Development

Airbnb provides three types of accommodation sharing entire house/apartment, private room and shared room (Perez-Sanchez, Serrano-Estrada, Marti, & Mora-Garcia, 2018). The sharing types are classified based on different levels of administrative procedures such as registrations or qualifications and service level. For instance, the city of San Francisco requests that hosts obtain business certifications for accommodation sharing for the short term, and entire house sharing is limited to less than 90 days (Sans & Quaglieri, 2016). Gunter (2018) examined the probability of

bookings in terms of characteristics of accommodation sharing. Compared to sharing a part of a house, entire house sharing shows a larger number of bookings (Gunter, 2018). This study hypothesized the how occupancy rates are affected by the sharing type.

**H1:** The sharing type of accommodation affects occupancy rates.

Accommodation sharing described as network hospitality in terms of social interaction by exchanging accommodations (Ikkala & Lampinen, 2015). Xie and Mao (2017) found that the effects of host attributes have a significant impact on the performance of registered Airbnb based on hosts' credibility and their properties. According to the interaction between hosts and guests, the platform provides information such as reviews, response time and rate, and other information such as photos. The number of reviews and their contents encourage guests to use accommodation sharing and positively influence performance (Poon & Huang, 2017). The number of photos and the good quality of photos also motivate guests to choose the accommodations (Ert, Fleischer, & Magen, 2016). Xie and Mao (2017) found that a higher response rate has more reservations (Xie & Mao, 2017). Instant booking allows immediate reservations without host approval (Guttentag & Smith, 2017), and the feature of instant booking improves business performance (Cheng & Foley, 2019). Therefore, this study hypothesized the effects of hosts' communication attributes (e.g., number of reviews and photos, response rate and time, and instant booking) on occupancy rates to measure how these attributes affect performance.

**H2:** Hosts' communication attributes affect occupancy rates.

Price has played a key role in decision making. Qiu, Fan, and Liu (2018) found that the increase in price, including nightly rate and other additional fees such as extra guests' fee and security deposits decrease the probability of being booked. Unlike other additional fees, cleaning fees tend to increase the probability of being booked because cleaning fees strongly signal clean accommodations (Yao, Qiu, Fan, Liu, & Buhalis, 2019). This study hypothesized the effects of

value attributes (e.g., published nightly rate and the status of charging additional fees) on occupancy rates to measure how the changes in costs for accommodation sharing influence occupancy rates.

**H3:** Price attributes affect occupancy rates.

Airbnb has awarded the superhosts designation to hosts who have more than 10 days' booking without cancellation with higher ratings and prompt response to guests' inquiries. Teubner, Saade, Hawlitschek, and Weinhardt (2016) investigated how reputations translate into economic values and found that signals such as rating scores and superhost status can provide economic value. Accommodations with superhost status would have large numbers of positive reviews and ratings, so guests are willing to pay more for the accommodations with superhosts (Liang, Schuckert, Law, & Chen, 2017). Therefore, this study hypothesized effects of service quality attributes (e.g., the status of superhost and rating for accommodations by already experienced guests) on occupancy rates to measure the impact on performance.

**H4:** Service quality attributes affect occupancy rates.

### **3.5 Methodology**

Study 1 investigated how accommodation attributes affect occupancy rates as performance indicator. In order to examine the relationship between attributes and business performance of accommodation sharing, this study conducts multivariate regression analyses. Categorical data are transformed into dummy variables. This study applied data of Airbnb in Busan and Jeju from January 1 to December 31 in 2018, provided by Airbnb. The total number of listed accommodation sharing were 5,109 accommodations in Busan and 11,502 accommodations in Jeju. This study included only the accommodation sharing with residential properties and an occupancy rate greater than zero. Airbnb allowed registering both commercial and noncommercial sharing properties on the platforms (Mansfeldt, 2015). However, this study applied accommodation sharing with residential properties by excluding commercial accommodations such as hotels, hostels, and holiday

apartments, as this study focuses on the effects of P2P accommodation sharing that are residential types. More than 90 property types of registered accommodation are subcategorized and re-classified in this study such as apartments, houses, lofts, and villas.

Unlike occupancy rate of hotels for measuring during a whole year in 365 days, the occupancy rate of P2P accommodations is a portion of reserved days from available days, after excluding blocked days (Lane, 2016) and the fluctuation of occupancy rate can represent a significant business impact (Kakar, Franco, Voelz, & Wu, 2016). In the case of Busan, this study used 2,826 observations of registered residential property types, while in the case of Jeju, this study includes 3,522 observations of registered residential property types.

### 3.6 Test of Hypotheses

Study 1 investigated which attributes of accommodation sharing affect occupancy rates as performance indicator. This study developed hypotheses for sharing type (H1), host's communication (H2) including number of reviews and photos, response rate and time, and instant booking, price attributes (H3) including published nightly rate and status of additional fees such as cleaning fees, security deposits, extra guest fees, and service quality (H4) including superhost status and overall rating. The following tables summarized the results of regression analyses in Busan (Table 4) and Jeju (Table 5). This study applied multiple regression analyses by considering four cases including all sharing types, entire houses, private rooms, and shared rooms

**Table 4. Effects of Determinants on Occupancy in Busan**

Dependent Variable <b>Occupancy Rate</b>	<b>Standard Coefficient (t-value-Sig)</b>			
	<b>All Sharing type</b>	<b>Entire Houses</b>	<b>Private Rooms</b>	<b>Shared Rooms</b>
Sharing Type (Base Group: Entire house)				
Private Room	-0.197 (-9.48***)			
Shared Room	-0.071 (-3.65***)			
Hosts' Communication				
Number of Reviews	0.264 (14.38***)	0.292 (13.94***)	0.225 (3.9***)	0.136 (0.88)
Number of Photos	0.077 (4.11***)	0.071 (3.3***)	0.075 (1.33)	0.205 (1.54)
Response Rate	0.004 (0.17)	-0.025 (-0.96)	0.07 (1.19)	-0.139 (-0.74)

Response time (minutes)	-0.068 (-3.18***)	-0.129 (-4.91***)	0.014 (0.23)	0.296 (1.51)
Instant Booking	0.133 (7.37***)	0.125 (6.06***)	0.163 (3.06***)	0.251 (1.97*)
Price Attributes				
Published Nightly Rate	-0.164 (-7.22***)	-0.193 (-7.33***)	-0.162 (-2.86***)	-0.108 (-0.93)
Deposit fee (charged:1)	-0.01 (-0.56)	-0.022 (-1.12)	0.048 (0.9)	0.051 (0.35)
Cleaning fee (charged:1)	0.024 (1.26)	0.007 (0.36)	0.052 (0.96)	0.112 (0.95)
Extra guest fee (charged:1)	-0.035 (-2.08**)	-0.032 (-1.65*)	-0.052 (-0.99)	-0.136 (-1.03)
Service Quality Attributes				
Superhost	0.101 (5.57***)	0.133 (6.32***)	0.028 (0.49)	0.46 (3.04***)
Overall rating	0.089 (4.83***)	0.091 (4.13***)	0.077 (1.38)	0.142 (1.23)
Number of Observation	2,083	1,665	346	72
S-square	0.4494	0.4169	0.2167	0.575

\*\*\* Significance at 0.01 level (2-tailed); \*\* Significance at 0.05 level (2-tailed); \* Significance at 0.1 level (2-tailed)

**Table 5. Effects of Determinants on Occupancy in Jeju**

Dependent Variable Occupancy Rate	Standard Coefficient (t-value-Sig)			
	All Sharing types	Entire Houses	Private Rooms	Shared Rooms
Sharing Type (Base Group: Entire house)				
Private Room	-0.079 (-3.97***)			
Shared Room	-0.133 (-6.93***)			
Hosts' Communication				
Number of Reviews	0.366 (20.7***)	0.374 (17.16***)	0.418 (11.37***)	0.082 (1.1)
Number of Photos	0.05 (2.73***)	0.059 (2.67***)	0.043 (1.17)	0.079 (0.95)
Response Rate	-0.005 (-0.25)	0.007 (0.3)	-0.02 (-0.47)	-0.001 (-0.01)
Response time (minutes)	-0.123 (-6.11***)	-0.148 (-6.21***)	-0.053 (-1.25)	-0.215 (-1.78*)
Instant Booking	0.072 (4.1***)	0.031 (1.44)	0.175 (4.63***)	-0.017 (-0.2)
Price Attributes				
Published Nightly Rate	-0.007 (-0.32)	-0.015 (-0.58)	-0.051 (-1.36)	0.302 (2.81***)
Deposit fee (charged:1)	-0.056 (-3.19***)	-0.074 (-3.45***)	0.019 (0.53)	-0.273 (-3.24***)
Cleaning fee (charged:1)	0.104 (5.62***)	0.121 (5.29***)	0.036 (0.96)	0.3 (2.28**)
Extra guest fee (charged:1)	-0.05 (-2.84***)	-0.058 (-2.79***)	-0.021 (-0.59)	-0.069 (-0.95)
Service Quality Attributes				
Superhost	0.049 (2.76***)	0.067 (3.07***)	0.011 (0.31)	0.009 (0.13)
Overall rating	0.064 (3.68***)	0.076 (3.57***)	0.059 (1.64)	-0.115 (-1.56)
Number of Observation	2,454	1,713	619	122
S-square	0.3211	0.2948	0.2851	0.5631

\*\*\* Significance at 0.01 level (2-tailed); \*\* Significance at 0.05 level (2-tailed); \* Significance at 0.1 level (2-tailed)

### **Sharing Types**

The effects of sharing types (H1) on occupancy rate showed significance at  $\alpha = 0.01$  level in both Busan and Jeju for analysis of all sharing types, while analyses of private room sharing and shared room showed negatively significant. The results of ANOVA showed a significant difference in sharing types at the 0.01 level with  $F = 168.53$  ( $R\text{-Square} = 0.1067$ ) in Busan and  $F = 104.83$  ( $R\text{-Square} = 0.0562$ ).

### ***Hosts' Communication Attributes***

This study examined the number of reviews (H2a), number of photos (H2b), response rate (H2c), response time (H2d) and instant booking which is booking with benefits to hosts and guests (H2e) for hosts' communication attributes (H2). For analyses of entire house and private room sharing both in Busan and Jeju, the number of reviews (H2a) and photos (H2b) positively affected occupancy rates at  $\alpha = 0.01$ . Effects of response rates (H2c) found insignificant for four cases of analyses in both Busan and Jeju, while the response time (H2d) negatively affected occupancy rates for analyses of all sharing types and entire house at  $\alpha = 0.01$  both in Busan and Jeju. The results implied that guests have higher expectations on prompt response. The instant booking positively affected the occupancy rate at  $\alpha = 0.01$  all four cases of analyses in Busan and cases of all sharing types and private room sharing in Jeju. For analyses of shared room, effects of hosts' communication do not show significant both in Busan and Jeju except response time in Jeju.

### ***Price Attributes***

According to price attributes (H3), this study investigated the published nightly rate (H3a) and the status of additional fees such as security deposits (H3b), cleaning fees (H3c) and extra guest fees (H3d) as dummy variables. In the cases of Busan, effects of published nightly rate (H3a) and extra guests fees (H3d) negatively affected on occupancy rates for cases of all sharing types and entire house sharing. In the case of Jeju, the published nightly rates (H3a) showed insignificant for analyses of all sharing types and entire house and private rooms sharing, while significant for analysis of shared rooms.

### ***Service Quality Attributes***

According to service quality attributes (H4), this study examined the status of superhost (H4a) and overall rating (H4b). Effects of attributes of superhost (H4a) and overall rating (H4b) significantly affected occupancy rates at  $\alpha = 0.01$  for analyses of all sharing types and entire house

sharing in both Busan and Jeju, while insignificantly affected occupancy rates for analyses of private room sharing and shared room except effects of superhost for shared room.

### 3.7 Additional Findings

Additionally, this study analyzed occupancy rates based on sharing types. In the case of Busan, the number of entire house sharing accounted for 54.6% occupancy rate, the number of private room sharing accounts 33.3% occupancy rate, and the number of shared rooms accounted for 28.3% occupancy rate. In the case of Jeju, the number of entire house sharing accounted for 43.9% occupancy rate, the number of private room sharing accounted for 35.5% occupancy rate, and the number of shared rooms sharing accounted for 20.7% occupancy rate. This study found that the number of hosts provided entire house sharing is higher than other types and guests also more frequently use entire house sharing, despite the legal concerns. Regarding the status of service attributes, this study found that 22.67% of accommodation sharing in Busan have been awarded superhost badges and the average overall rating was 92.47, while only 14.29% of accommodation sharing in Jeju has been awarded superhost and the average overall rating is 94.186.

This study conducted two-way ANOVA and found that means of occupancy rates differ based on sharing types and property types at  $\alpha = 0.01$  and  $F = 110.73$  ( $r\text{-square} = 0.1357$ ) in Busan and significant  $\alpha = 0.01$  and  $F = 47.39$  ( $r\text{-square} = 0.0631$ ) in Jeju. ANOVA results also found that means of occupancy rate differ based on number of bedrooms at  $\alpha = 0.01$  and  $F = 81.48$  ( $r\text{-square} = 0.1478$ ) in Busan and  $\alpha = 0.01$  and  $F = 32.64$  ( $r\text{-square} = 0.0610$ ) in Jeju. Results show that means of occupancy rate differ based on districts  $\alpha = 0.01$  and  $F = 100.04$  ( $r\text{-square} = 0.1756$ ) in Busan and based on city at  $\alpha = 0.01$  and  $F = 78.46$  ( $r\text{-square} = 0.0627$ ) in Jeju. This study conducted a two-way MANOVA for means of occupancy rates and published nightly rates between property types and rooms and found significant difference at  $\alpha = 0.01$  with  $F = 60.79$  and Wilks' lambda =

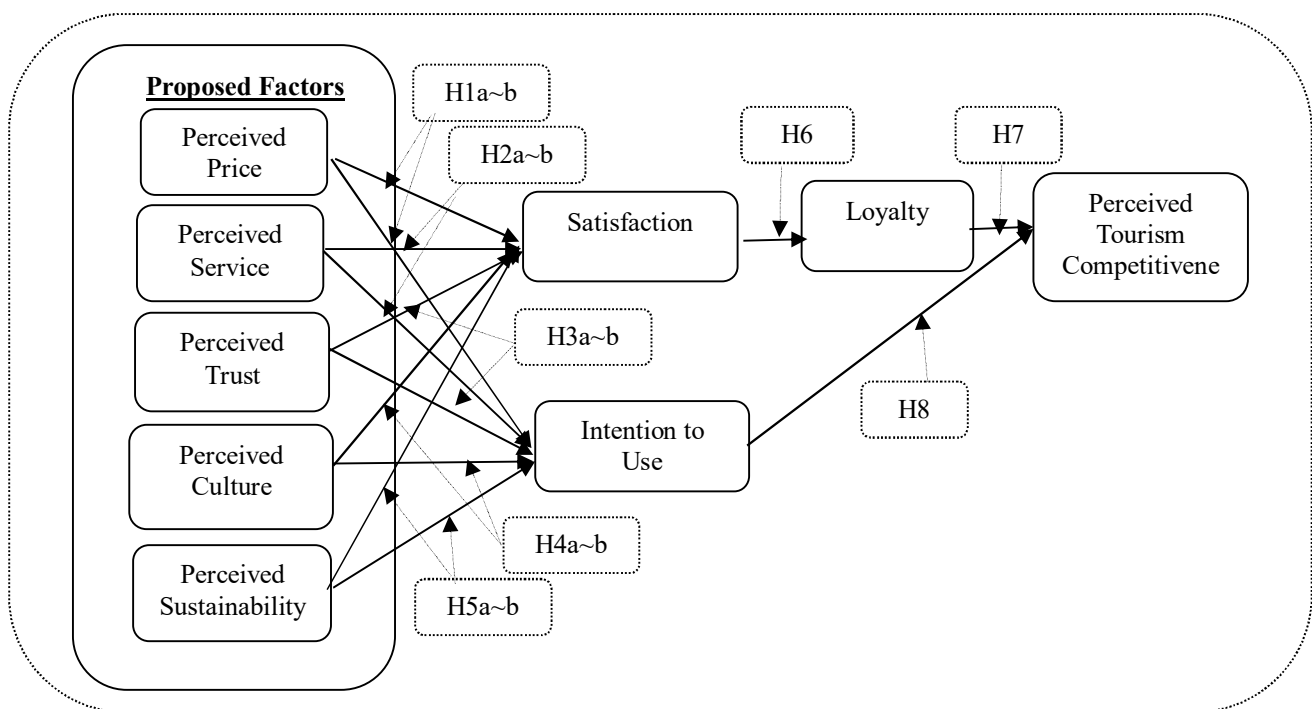
0.6943 in the case of entire house sharing in Jeju.

## IV. Study 2: Use of Primary Data

Study 2 developed hypotheses based on how customers and potential customers perceive proposed variables on accommodation sharing and applied primary data.

### 4.1 Hypotheses Development

Study 2 hypothesized the effects of satisfaction, loyalty, intention to use, and perceived tourism competitiveness on accommodation sharing. This study proposed the effects of factors including perceived price, service, trust, culture, and sustainability (Figure 1). Study 2 examined factors based on customers' experiences and potential customers' expectation on accommodation sharing.



\* H1a ~ 5a: effects of factors on satisfaction; H1b ~ 5b: effects of factors on intention to use.

**Figure 1. Proposed Model for Effects of Factors, Satisfaction, Loyalty, Intention to Use, Perceived Tourism Competitiveness**

#### 4.1.1 Effects of Perceived Price on Satisfaction



This study looked into the effect of perceived price on accommodation sharing. Teubner, Hawlistchek, and Dann (2017) applied reputation attributes such as average rating score, super-host badge system, duration of membership, number of photos, verified ID with apartment, city, convenience, and personal attributes as price determinants of Airbnb. While there are diverse variables that affect price, this study proposes perceived price on accommodation sharing compared with other accommodation types, such as hotels. By classifying customers who experienced accommodation sharing and potential customers, this study hypothesized the effects of price on satisfaction and intention to use.

**H1a:** Perceived price significantly affects satisfaction with accommodation sharing.

**H1b:** Perceived price significantly affects intention to use accommodation sharing.

#### **4.1.2 Effects of Perceived Service on Satisfaction**

One of the purposes of accommodation sharing is to foster relationships through interaction between service providers (hosts) and customers (guests). The presence of hosts with customers by providing services including bnb (i.e., bed and breakfast) is necessary to use accommodation sharing in Korea, while regulations differ based on regions across the world. Providing better services via face-to-face interactions is considered important to enhancing the quality of service and relationship-building experience for both hosts and customers. This study also proposes that providing bundling services for other products/services via platforms or offline will improve customer satisfaction. Therefore, this study hypothesizes the effects of perceived service on satisfaction on accommodation sharing.

**H2a:** Perceived service significantly affects satisfaction with accommodation sharing.

**H2b:** Perceived service significantly affects intention to use accommodation sharing.

#### **4.1.3 Effects of Cultural Factors on Satisfaction**

By providing bed and breakfast (bnb), both service providers and customers share culture and experience. Paulauskaite, Powell, Coca-Stefaniak, and Morrison (2017) investigate the phenomenon of authenticity-seeking tourism with local experiences such as unique accommodation, atmosphere, and interactions. This study hypothesized that how users perceive cultural factors will improve the level of satisfaction.

**H3a:** Perceived cultural benefits significantly affects satisfaction with accommodation sharing.

**H3b:** Perceived cultural benefits significantly affects intention to use accommodation sharing.

#### **4.1.4 Effects of Perceived Trust Factor on Satisfaction**

Trust as a psychological state (Rousseau et al., 1998) refers to a disposition to engage in social exchanges that involve uncertainty and vulnerability (Bicchieri et al., 2004). Liang, Choi, and Joppe (2018) measured satisfaction level along with trust on accommodation sharing by looking at both trust in the platform and trust in the hosts. Previous studies (Belk, 2010; Botsman & Rogers, 2010) stated that trust plays a crucial role in the sharing economy. This study posits that building trust is pivotal to the development and establishment of the sharing economy. In order to enhance trust, platforms on accommodation sharing often use applied systems such as rating scores and the superhost badge system. Therefore, this study hypothesized effects of perceived trust on satisfaction with accommodation sharing.

**H4a:** Perceived trust significantly affects satisfaction with accommodation sharing.

**H4b:** Perceived trust significantly affects intention to use accommodation sharing.

#### **4.1.5 Effects of Perceived Sustainability on Satisfaction**

Sustainability utility refers to the “belief that sharing is a way to protect environment or reduce wastes” (Mintona & Roseb, 1997). Previous studies argued that the sharing economy as a path to sustainability (Martin, 2015) contributed to social gains, which result from protecting the environment, reducing water usage, and increased job opportunities (La & Cho, 2019). Demailly

and Novel (2014) stated that the sustainability of shared goods, e.g., renting, may lead to a reduction in the number of goods produced and will support a sustainable economy. Therefore, this study hypothesized that how users perceive sustainability will improve the level of satisfaction.

**H5a:** Perceived sustainability significantly affects satisfaction with accommodation sharing.

**H5b:** Perceived sustainability significantly affects intention to use accommodation sharing.

#### **4.1.6 Effects among Satisfaction, Loyalty, Intention to Use, and Tourism Competitiveness**

A study by Liang, Choi, and Joppe (2018) proposed that Airbnb is a service that consumers evaluate in terms of their level of satisfaction with each aspect of the transaction process using different criteria from those used to evaluate the actual lived experience. From a motivation-based segmentation study, Guttentag, Smith, Potwawrka, and Havitz (2017) stated that hundreds of thousands of tourists choose not to stay in a traditional tourism accommodation, such as a hotel, but rather to stay at the residence of a stranger found online via Airbnb. This study hypothesized effects of the level of satisfaction on loyalty and effects of loyalty and intention to use on tourism competitiveness for experienced customers, while looking into the effects of intention to use for non-experienced customers.

**H6:** The level of satisfaction affects loyalty in terms of accommodation sharing.

**H7:** The level of loyalty to accommodation sharing affects tourism competitiveness.

**H8:** The level of intention to use accommodation sharing affects tourism competitiveness.

## **4.2 Methodology**

Study 2 conducted a survey to measure the effects of determinants, satisfaction, loyalty, intention to use, and the tourism industry by classifying into existing and potential customers. The survey was developed in English and translated in English. Back translation was applied to match the original version and the version translated back. This study developed multi-item scales to measure each of the variables with a 7-point Likert scale from 1 = *strongly disagree* and 7 =

*strongly agree*. This study collected the data via online with the help of a well-known research company. Response rate was 38.5%. Quantitative methods, including factor analysis, regression, ANOVA (Analysis of Variance), and *t*-test were applied to measure effects and relationships to test the hypotheses. This study conducted a pilot study to check the wording and structure of the survey.

### **4.3 Data Analysis**

#### **4.3.1 Descriptive Statistics**

Of the 310 respondents, 49.4% were female and 50.6% were male. 56.8% were married and 43.2% were unmarried. 8.7% were 19-24 years old, 12.9% were 25-29 years old, 10.6% were 30-34 years old, 13.9% were 35-39 years old, 10.3% were 40-44 years old, 13.2% were 45-49 years old, 12.6% were 50-54 years old, 11.0% were 55-59 years old, and 6.8% were 60 years or older. With regard to education level, 17.1% were high school graduates, 6.5% were working on an attending associate degree or an associate degree, 63.9% were working on an undergraduate degree or hold an undergraduate degree, 9.7% were working on a master degree or hold a master degree, and 2.9% were working on a doctoral degree or hold a doctoral degree. In terms of income, 4.8% of respondents had an annual household income of less than \$10,000, 5.2% had annual incomes between \$10,000 and \$20,000, 10.6% had annual incomes between \$20,000 and \$30,000, 16.1% had annual incomes between \$30,000 and \$40,000, 14.5% had annual incomes between \$40,000 and \$50,000, 15.8% had annual incomes between \$50,000 and \$60,000, 9.4% had annual incomes between \$60,000 and \$70,000, and 23.5% had annual incomes above \$70,000. With regard to employment, 6.5% were self-employed, 12.3% were housewives, 10.6% were blue-collar workers, 55.5% were white-collar workers, and 8.1% were students.

Among respondents, 32.9% experienced and 67.1% were not experienced accommodation sharing as customers. 6.8% experienced accommodation sharing as hosts. Among all respondents, 7.8% stated disagree, 35.3% stated neutral, 42.2% stated agree, and 14.7% stated strongly agree for

opinion on overall attitude on accommodation sharing

#### 4.3.2 Tests of Hypotheses

This study applied factor analysis to check the validity of the major constructs, using principal component analyses as the extraction method and Varimax rotation methods with Kaiser Normalization. The results of the factor analyses show that items represent major variables, with Eigen values greater than 1.00. Factor scores were used for regression analyses. For the effects of factors on satisfaction, the overall, the results of the ANOVA find the models significant at the 0.01 level with  $F = 2.881$  ( $r\text{-square} = 0.200$ ). As Table 6 shows, hypotheses 1a and 2a were accepted.

Variable (Independent -> Dependent)	Standardized Coefficient (t-value-Sig)
Perceived Price → Satisfaction (H1a)	0.308 (2.393**)
Perceived Service → Satisfaction (H2a)	0.222 (1.764*)
Perceived Trust → Satisfaction (H3a)	0.000 (0.003)
Perceived Culture → Satisfaction (H4a)	0.075 (0.559)
Perceived Sustainability → Satisfaction (H5a)	0.068 (0.553)

\*\*\* Significant at 0.01 level (2-tailed). \*\* Significant at 0.05 level (2-tailed). \* Significant at 0.1 level (2-tailed).

**Table 6. Effects of Factors on Satisfaction on Accommodation Sharing**

Table 7 summarized results of multiple regression analysis for the effects of factors on intention to use. Overall, the results of the ANOVA find the models significant at the 0.01 level with  $F = 12.683$  ( $r\text{-square} = 0.3388$ ). As table 8 shows, hypotheses 6a and 6b were accepted.

Variable (Independent -> Dependent)	Standardized Coefficient (t-value-Sig)
Perceived Price → Intention to Use (H1b)	0.035 (0.487)
Perceived Service → Intention to Use (H2b)	0.307 (3.870***)
Perceived Trust → Intention to Use (H3b)	0.102 (1.480)
Perceived Culture → Intention to Use (H4b)	0.166 (2.071**)
Perceived Sustainability → Intention to Use (H5b)	0.073 (0.931)

\*\*\* Significant at 0.01 level (2-tailed). \*\* Significant at 0.05 level (2-tailed). \* Significant at 0.1 level (2-tailed).

**Table 7. Effects of Factors on Intention to Use on Accommodation Sharing**

This study also conducted regression analyses to find effects of satisfaction, loyalty, and tourism competitiveness. Overall, the results of the ANOVA find the models significant at the 0.01 level

with  $F = 40.130$  ( $r\text{-square} = 0.288$ ),  $F = 10.079$  ( $r\text{-square} = 0.092$ ), and  $F = 66.397$  ( $r\text{-square} = 0.244$ ). As table 8 shows, hypotheses 6, 7, and 8 were accepted.

Variable (Independent -> Dependent)	Standardized Coefficient (t-value-Sig)
Satisfaction → Loyalty (H6)	0.537 (6.335***)
Loyalty → Tourism Competitiveness (H7)	0.304 (3.175***)
Intention to Use → Tourism Competitiveness (H8)	0.494 (8.148***)

\*\*\* Significant at 0.01 level (2-tailed). \*\* Significant at 0.05 level (2-tailed). \* Significant at 0.1 level (2-tailed).

**Table 8. Effects among Satisfaction, Loyalty, Intention to Use, and Tourism Competitiveness**

#### 4.3.3 Additional Findings

Additionally, the independent sample's  $t$ -tests found that the means of satisfaction differed based on gender and marital status. Logistic regression results showed that gentrification is related to marital status, while social ties among hosts, guests, and local communities are related to gender. Two-way ANOVA results showed that means of satisfaction differ based on age group and gender. Another two-way ANOVA results showed that means of intention to use differ based on gender, and there were interaction effects with gender and age groups (Figure 2). Overall, satisfaction level was higher with females except for the age group of 40-44, while overall intention to use was higher with male than females except for the age groups of 30-34 and 55-59. Results of MANOVA show that perceptions of issues such as security, perceived price, helpfulness on local communities, gentrification differ based on age groups, while perceptions of issues such as eco-friendliness, privacy, and sanitation differed based on gender.

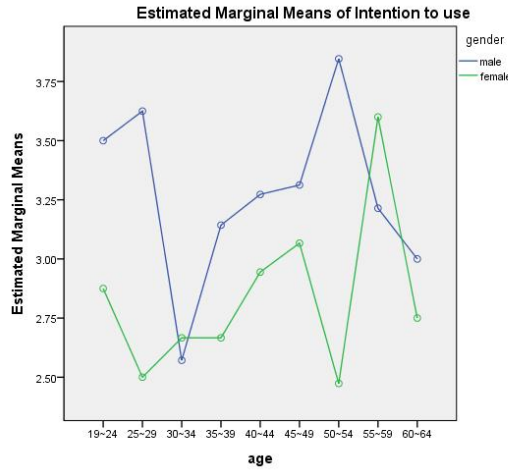


Figure 2. The Effects of Intention to Use Based on Gender and Age Groups

## V. Conclusion

This study examined what are key factors that affect occupancy rates as performance indicator, customer satisfaction, loyalty, intention to use, and perceived tourism competitiveness. For the effects of factors on occupancy rates, this study applied secondary data (Study 1) of Airbnb, while for the effects of factors on satisfaction, loyalty, intention to use, and perceived tourism competitiveness, this study applied primary data collected via online survey. Study 1 selected two regulation-free zones in Korea that are also known as travel destinations. This study examined effects of sharing types, communication, price, and service attributes on occupancy rates for Study 1, while Study 2 investigated effects of perceived price, service, trust, culture, and sustainability on satisfaction and intention to use for both existing and potential customers. Perceived trust, culture, and sustainability were applied for Study 2 as those subjective measurements were not available from Airbnb data. Study 2 also examined effects of satisfaction on loyalty and loyalty on perceived tourism competitiveness. Table 9 summarized Study 1 and 2. Study 1 examined effects based on sharing types related to the issues of current regulations on entire house sharing without hosts. While entire house is regulated, customers' usage on entire house was higher as occupancy rates showed. This issue raised concerns about information asymmetry about regulations and customers'

awareness on accommodation sharing economy. Study 1 also adopted communication attributes by considering importance of interactivity between hosts and customers.

**Table 9. Summary of Study 1 & Study 2**

	<b>Study 1</b>	<b>Study 2</b>
<b>Applied Data</b>	Secondary Data (Airbnb via AirDNA)	Primary Data (Online Survey)
<b>Types of Analysis</b>	Objective	Subjective
<b>Independent Variables</b>	Sharing types, communication, price, and service	Perceived price, service, trust, culture, and sustainability
<b>Dependent Variables</b>	Occupancy rate as business Indicator	Satisfaction, intention to use, loyalty, and perceived tourism competitiveness
<b>Data Analysis</b>	Multiple regression analyses, one-way and two-way ANOVA, MANOVA	Factor, multiple regression analyses, one-way and two-way ANOVA, MANOVA

Overall, results of Study 1 showed that means of occupancy rates differ based on sharing types in both Busan and Jeju. Effects of majority of communication attributes except response rate showed significant for the analysis based on all sharing types in both Busan and Jeju. Compared to Busan, effects of published nightly rates on occupancy rate showed insignificant for analyses of entire house and private rooms in Jeju. This study found that customers in some tourism destinations, consider other accommodation attributes on their purchasing decisions based on their needs and preference, rather than mere nightly rates during their stays. In both Busan and Jeju, effects of ratings of price value and cleanliness on overall rating showed stronger than other effects. Additional results of MANOVA showed that the occupancy rate and published nightly rates have a significant difference in terms of property types and the number of rooms in the case of Jeju.

The results of Study 2 found that the effects of perceived price and service on satisfaction were showed significant based on existing customers, while the effects of perceived service and culture on intention to use showed significant based on potential customers. However, effects of trust and sustainability on satisfaction and intention to use do not show significant. The results provide implications as to which aspects of accommodation sharing need to be addressed to meet



the meaning of sharing. Effects of satisfaction and intention to use on tourism competitiveness showed significant. Since Study 1 had limitation for the analyses based on demographics due to the limitations from the data, additional analyses based on demographics were conducted with Study 2. Study 2 found different effects based on gender and age groups. Perceptions on security, price, helpfulness to local communities, gentrification, eco-friendliness, privacy, and sanitation showed different effects based on demographics.

This study provides policy and managerial implications. Results of Study 1 revealed that sharing types matter for customers' choices and performance, while there are regulatory policy issues on sharing types in Korea. Accommodation sharing with hosts has been addressed as an important issue due to sharing culture and experience, while Study 2 revealed that perceived culture does not significantly affect satisfaction. However, effects of perceived culture on intention to use show significant among potential customers of accommodation sharing. Sharing culture is related to the meaning of "bnb (bed and breakfast)." By providing breakfast, customers have opportunity to experience, share culture, and interact with hosts. Policy implications on laws and regulations on homestay for travelers banned entire house without hosts and encourage cultural experience. However, this study found how customers actually satisfied with accommodation sharing is in different direction from meanings implied in policy. Social appeal including interaction with the hosts and getting to know people from the local neighborhoods showed significant in travel destination selection based on U.S. and Finland respondents (Tussyadiah & Pesonen, 2016), while results of this study based on Korean respondents showed differently. The results implied which determinants affect accommodation sharing might differ based on culture. Further, results of both Study 1 and 2 based on existing customers found that price and service factors are significant. Results of Study 2 based on potential customers showed service factor were significant on intention to use, while price factor was not significant.

Results provide implications on how customers use and perceive accommodation sharing meets pure meanings of sharing such as sustainability and trust. Previous studies (Demailly & Novel, 2014, Martin, 2015) addressed the sharing economy's promises of sustainability. Results of this study implied how customers perceive the sharing economy at the societal level (Malhotra, & Alstyne, 2014) needs to be addressed via promotion. Well suited policies should be prepared for better usage of accommodation sharing at societal level and to strengthen tourism competitiveness through unlocked fields. Quattrone, Proserpio, and Capra (2016) also stated that traditional regulations have not been able to respond to changes of Airbnb and need to refine regulations. At individual level, results showed that customers' expectations on price and integrated services are higher than other attributes. Sharing economy platforms should consider to build better relationships with customers by increasing satisfaction and loyalty. Fostering experiences via promotion will help enhance relationships between hosts, customers, and local communities.

This study has some limitations. This study examined the effects of accommodation sharing on the tourism industry, while conflicts with the existing industry such as hotels have not investigated. Future research should also measure the down sides of accommodation sharing in terms of factors affect that dissatisfaction. Future studies should also consider other types of sharing economy and cross-cultural analyses.

## **References:**

- Agyeman, Julian, Duncan McLaren, and Adrienne Schaefer-Borrego (2013). "Sharing Cities," *Friends of the Earth Briefing*, September.
- Arnould, Eric J. and Alexander S. Rose (2015), "Mutuality: Critique and Substitute for Belk's Sharing," *Marketing Theory*, 1-25.
- Bardhi, Fleura and Giana M. Eckhardt (2012). "Access-Based Consumption: The Case of Car Sharing," *Journal of Consumer Research*, 39, 881-898.
- Barnes, S. J., and Mattsson, J. (2016). "Building Tribal Communities in the Collaborative Economy: An Innovation Framework," *Prometheus*, 34(2), 95-113.

- Belk, R. (2007). "Why Not Share Rather Than Own?" *The Annals of the American Academy of Political and Social Science*, 611(1), 126-140.
- \_\_\_\_\_. (2010). Sharing, *Journal of Consumer Research*, 36(5), 715-734.
- Bicchieri, C., Duffy, J., and Tolle, G. (2004). "Trust among Strangers," *Philosophy Science*, 71(3), 286-319.
- Böcker, L. and Meelen, T. (2017). "Sharing for People, Planet or Profit? Analysing Motivations for Intended Sharing Economy Participation," *Environmental Innovation and Societal Transitions*, 23, 28-39.
- Botsman, R. and Rogers, R. (2011). *What's Mine is Yours: How Collaborative Consumption is Changing the Way We Live*: New York: Harper Business.
- \_\_\_\_\_ and \_\_\_\_\_ (2010). *What's Mine is Yours: The Rise of Sharing Economy*.
- \_\_\_\_\_ (2013). "The Sharing Economy Lacks a Shared Definition. *Fast Company*." Retrieved from <http://www.fastcoexist.com/3022028/thesharing-economy-lacks-a-shared-definition>
- Cheng, M., and Foley, C. (2019). "Algorithmic Management: The Case of Airbnb," *International Journal of Hospitality Management*, 83, 33-36.
- Choi, S. and S. Oh (2017). "Sharing Platform: Open Innovation or Market Limitation in the case of Airbnb," *STI Policy Review*, 27(7), 54-59.
- Demailly, Damien and Anne-Sophie Novel (2014). "The Sharing Economy: Make it Sustainable," IDDRI, ISSN: 2258-7535
- DBR (2019). "Sharing Business: Special Report," *Dong-A Business Review*, 2(267).
- Ert, E., Fleischer, A., and Magen, N. (2016). "Trust and Reputation in the Sharing Economy: The Role of Personal Photos in Airbnb," *Tourism Management*, 55, 62-73.
- Farronato, Chiara and Fradkin, Andrey (2019). "The Welfare Effects of Peer Entry in the Accommodation Market: The Case of Airbnb," <https://www.brookings.edu/research/the-welfare-effects-of-peer-entry-in-the-accommodation-market-the-case-of-airbnb/>
- Galbreth, Michael, Ghosh, Bikram, and Shor, Mikhael (2012). "Social Sharing of Information Goods: Implications for Pricing and Profits," *Marketing Science*, 30(4), 603-620.
- Gunter, U. (2018). "What makes an Airbnb Host a Superhost? Empirical Evidence from San Francisco and the Bay Area," *Tourism Management*, 66, 26-37.
- Galbreth, M. R., Ghosh, B., & Schor, M (2012). "Social Sharing of Information Goods: Implications for Pricing and Profits," *Marketing Science*, 31(4), 603-620.

- Guttentag, Daniel and Smith, Stephen. (2017). "Assessing Airbnb as a Disruptive Innovation Relative to Hotels: Substitution and Comparative Performance Expectations," *International Journal of Hospitality Management*, 64, 1-10.
- \_\_\_\_\_, \_\_\_\_\_, Luke Potwawrka, and Mark Havitz (2017). "Why Tourists Choose Airbnb: A Motivation-Based Segmentation Study," *Journal of Travel Research*, 57(3), 342-359.
- Humphreys, Ashlee and Kent Grayson (2008), "The Intersecting Roles of Consumer and Producer: A Critical Perspective on Co-production, Co-creation, and Prosumption," *Sociology Compass*, 2(3), 963-80.
- Ikkala, T., & Lampinen, A. (2015). Monetizing Network Hospitality: Hospitality and Sociability in the Context of Airbnb. *Proceedings of the 18th ACM Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing*, 1033-1044, Vancouver, BC, Canada: ACM.
- Jaconi, M. (2014). "The 'On-Demand Economy' is Revolutionizing Consumer Behavior – Here's How," *Business Insider*, 13, Retrieved from <http://www.businessinsider.com/the-on-demand-economy-2014-7>
- Kakar, V., Franco, J., Voelz, J., and Wu, J. (2016). "Effects of Host Race Information on Airbnb Listing Prices in San Francisco," *MPRA Paper*.
- Kim, Min Jung (2019). "Benefits and Concerns of the Sharing Economy: Economic Analysis and Policy Implications," *KDI Journal of Economic Policy*, 41(1), 15-41.
- La, Soojung and Cho, Yoon C. (2019). "Investigating Utility, Attitude, Intention, and Satisfaction of Skill-Sharing Economy, *The International Journal of Industrial Distribution & Business*, January, 39-49.
- Lane, J. (2016). The Sharing Economy Checks In: An Analysis of Airbnb in the United States. *CBRE Hotels' Americas Research*.
- Lessig, L. (2008). *Remix: Making art and commerce thrive in the hybrid economy*. New York: Penguin.
- Liang, Lena Jingen, Choi, Hwansuk, and Joppe, Marion (2018). "Exploring the Relationship between Satisfaction, Trust, and Switching Intention, Repurchase Intention in the Context of Airbnb," *International Journal of Hospitality Management*, 69, 41-48.
- Liang, S., Schuckert, M., Law, R., & Chen, C.-c. (2017). "Be a "Superhost": The Importance of Badge Systems for Peer-to-peer Rental Accommodations," *Tourism Management*, 60, 454-465.
- Malhotra, Arvine and Marshall Van Alstyne (2014). "The Dark Side of the Sharing Economy...and

How to Lighten it,” *Communication of the ACM*, 57(11), 24-27.

Martin, Chris J. (2015), “The Sharing Economy: A Pathway to Sustainability or a Nightmarish form of Neoliberal Capitalism?” *Ecological Economics*, 121, 149-159.

Mansfeldt, O. (2015). “The ‘Airbnb Experience’ and the Experience Economy: the Spatial, Relational and Experiential in-betweenness of Airbnb,” in *Spatial Dynamics in the Experience Economy* 115-128, Routledge.

Mintona, Ann P. and Rose, Randall L. (1997). “The Effects of Environmental Concern on Environmentally Friendly Consumer Behavior: An Exploratory Study.” *Journal of Business Research*, 40(1), 37-48.

Oskam, Jeroen and Albert Boswijk (2016). “Airbnb: The Future of Networked Hospitality Businesses,” *Journal of Tourism Futures*, 2(1), 22-42.

Paulauskaite, D., Powell, R., Coca-Stefaniak, J., & Morrison, A. (2017). “Living Like a Local: Authentic Tourism Experiences and the Sharing Economy,” *International Journal of Tourism Research*, 19(6), 619-628.

Perez-Sanchez, V., Serrano-Estrada, L., Marti, P., and Mora-Garcia, R.-T. (2018). “The What, Where, and Why of Airbnb Price Determinants,” *Sustainability*, 10(12), 4596.

Poon, K. and Huang, W. J. (2017). “Past Experience, Traveler Personality and Tripographics on Intention to Use Airbnb,” *International Journal of Contemporary Hospitality Management*, 29(9), 2425-2443.

Quattrone, Giovanni, Davide Proserpio, and Licia Capra (2016). “Who Benefits from the “Sharing” Economy of Airbnb? In Proceedings of the 26<sup>th</sup> International ACM Conference.

Qiu, R., Fan, D., & Liu, A. (2018). “Exploring the Booking Determinants of the Airbnb Properties: an Example of the Listings of London,” In *Information and Communication Technologies in Tourism*, 44-51, Springer, Cham.

Ritzer, George, and Nathan Jurgenson (2010). “Production, Consumption, Prosumption: The Nature of Capitalism in the Age of the Digital ‘Prosumer’,” *Journal of Consumer Culture*, 10(1), 13-36.

Rousseau, D. M., Sitkin, S. B., Burt, R. S., and Camerer, C. (1998). “Not So Different after All: A Cross-discipline View of Trust,” *Academic Management Review*, 23(3), 393-404.

Sans, A., & Quaglieri, A. (2016). “Unraveling Airbnb: Urban Perspectives from Barcelona,” *Reinventing the Local in Tourism: Producing, Consuming and Negotiating Place*, 73, 209.

Scaraboto, Daiane (2015). “Selling, Sharing, and Everything in Between: The Hybrid Economies of Collaborative Networks,” *Journal of Consumer Research*, 42, 152-176.

Schor, Juliet (2014). “Debating the Sharing Economy,” *Great Transition Initiative*, Tellus Institute, <http://www.greattransition.org/publication/debating-the-sharing-economy>.

- Sherif, M. and Hovland, C. J., (1961). *Social Judgment: Assimilation and Contrast effects in Communication and Attitude Change*, New Haven, Conn: Yale University, Press.
- So, Kevin Kam Fund, Haemoon Oh, and Somang Min (2018). "Motivations and Constraints of Airbnb Consumers: Findings from a Mixed-Methods Approach," *Tourism Management*, 67, 224-236.
- Teubner, Timm, Hawlistchek, Florian, and Dann, David (2017). "Price Determinants on Airbnb: How Reputation Pays Off in the Sharing Economy," *Journal of Self-Governance and Management Economics*, 5(4), 53-80.
- \_\_\_\_\_, Saade, N., Hawlitschek, F., and Weinhardt, C. (2016). It's only Pixels, Badges, and Stars: On the Economic Value of Reputation on Airbnb. *Australasian Conference on Information Systems*, Wollongong.
- Toffler, Alvin (1980), *The Third Wave*, Morrow.
- Tussadiah, Lis P. and Juho Pesonen (2016). "Impacts of Peer-to-Peer Accommodation Use on Travel Patterns," *Journal of Travel Research*, 55(8), 1022-1040.
- Varma, Arup, Nenad Jukic, Almir Pestek, Clifford J. Shultz, and Svetlozar Nestorov (2016). "Airbnb: Exciting Innovation or Passing Fad?" *Tourism Management Perspectives*, 20, 228-237.
- Wang, D. and Nicolau, J. (2017). "Price Determinants of Sharing Economy based Accommodation Rental: A Study of Listings from 33 cities on Airbnb.com," *International Journal of Hospitality Management*, 62, 120-131.
- Xie, K. and Mao, Z. (2017). "The Impacts of Quality and Quantity Attributes of Airbnb Hosts on Listing Performance," *International Journal of Contemporary Hospitality Management*, 29(9), 2240-2260.
- Yao, B., Qiu, R., Fan, D., Liu, A., and Buhalis, D. (2019). "Standing Out from the Crowd – an Exploration of Signal Attributes of Airbnb listings," *International Journal of Contemporary Hospitality Management*. 31(12), 4520-4542.
- Yoon, H. (2017). "The Legal Problems of Sharing Economy," *Wonkwang Law Review*, 33(4), 53-74.
- Zervas, G., Proserpio, D., and Byers, J. (2017). "The Rise of the Sharing Economy: Estimating the Impact of Airbnb on the Hotel Industry," *Journal of Marketing Research*, 54(5), 687-701.